# Contractor Support to the Prophet Block II/III Initial Operational Test (IOT)

(ACAT II – No OSD Oversight)
SEPTEMBER 03
Fort Huachuca, AZ

# **Agenda**

Test Purpose

System Description

Test Execution

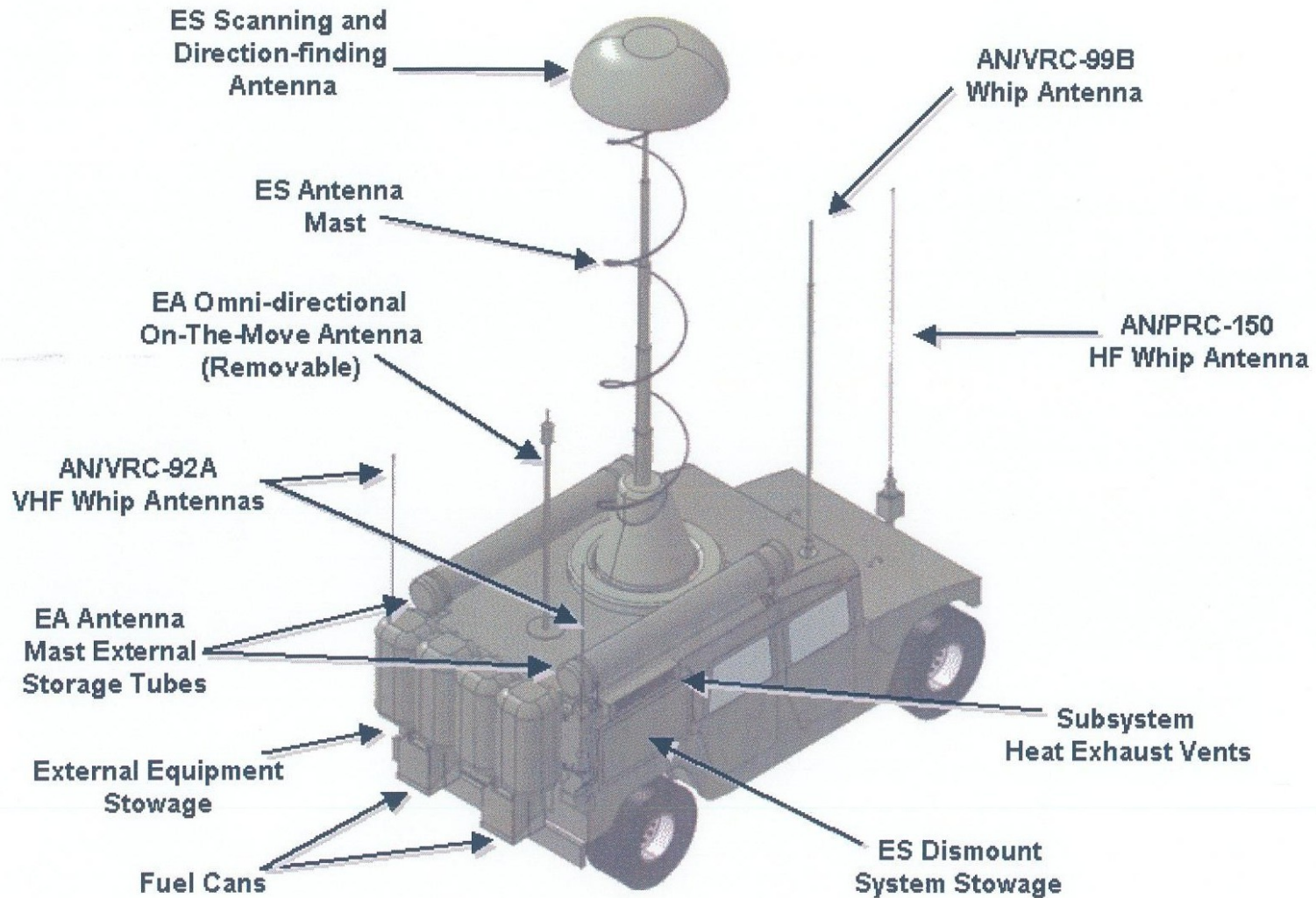Test Organization

Automation/Instrumentation/Simulation

Contractor Support

# Test Purpose

The purpose of the IOT is to provide data on the Prophet Block II/III system to support the evaluation of effectiveness, survivability, and suitability under realistic operational conditions and to support a full rate production decision and fielding decision.

# System Description

## Prophet Block 2/3 Sensor Vehicle

# System Description

As an objective force system, the Military Intelligence (MI) unit uses Prophet to provide a full-spectrum SIGINT capability encompassing continuous, all weather, Situational Awareness / Situational Understanding (SA/SU) to provide maneuver commanders Near Real Time (NRT) intelligence.

- Exploitation of Radio Frequency (RF) emissions through target detection, location, tracking, and classification

- Stationary, Dismounted and On-the-Move (OTM) collection

- Automated Processing/Reporting and Combat Net Radio (CNR) Communications

- Management and Analysis of Relevant Information (RI)

- Tasking and Dynamic Re-tasking of PG Sensors through Prophet Control (PC)

- Reliability and Maintainability

# Overall Event Concept*

IEWTD will conduct an initial operational test of the Prophet Blocks 2/3 by employing a SBCT TOC with a MCS and an ASAS RWS to evaluate value added.

The concept is to conduct the OT in two phases using  DPG NE Asia 4.0 scenario, tailored and refined by IEWTD to portray a robust SIGINT environment, with approval by TRADOC.

Phase 1:   SEP 04.  Eight hours of controlled threat broadcast per day
Phase 2:  SEP 04.  Seventy two hours of controlled, continuous threat broadcast

Broadcasts will be conducted by using MCSTF, VMT-A, VMT-B and real radios placed in accordance with threat doctrine.

Signal strength at the Prophet Sensors will be monitored with SMV Vans

* - Subject to change due to troop availability

# EVENT TEAM ORGANIZATION

- Phase 1 (84 personnel)
  - IEWTD
  - TRADOC
  - CONTRACTOR
- Phase 2 (118 personnel)
  - IEWTD
  - TRADOC
  - CONTRACTOR

# EVENT TEAM FUNCTIONS

- TEST OFFICER
- TEST NCOIC
- ORSA
- DATABASE MANAGEMENT
- RAM
- MANPRINT
- DATA COLLECTION

**Instrumentation**

**5 x Data Logger Laptop Computers -** These laptop computers will extract data that is sent from Prophet Blocks II/III to the PC. And, from the PC to the ASAS

**3 x Signal Monitoring Vehicle (SMV) -** SMV will monitor the signal strength and provide "ground truth" during live broadcast portion of OT at the Prophet 2/3       sensor locations.

**1 x Electronic Warfare Monitoring Facility (EWMF) -** EWMF will monitor the signal environment; control emitter arrays; and verify Threat emitter broadcasts.

## Simulation

**9 x Mobile Communications Simulator Threat Facility (MCSTF)** Replicates threat emitters.

**3 x Mobile Threat Emitters (MTE)** Replicates threat emitters on the move.

**1 x Vulnerability Mobile Transmitter A (VMT-A)** Replicates threat jammers.

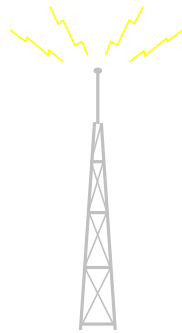**1 x Vulnerability Mobile Transmitter B (VMT-B)** Replicates threat jammers.

## Intelligence Modeling and Simulation for Evaluation (IMASE)

- **IMASE Scenario Generation Tool (ISGT)**

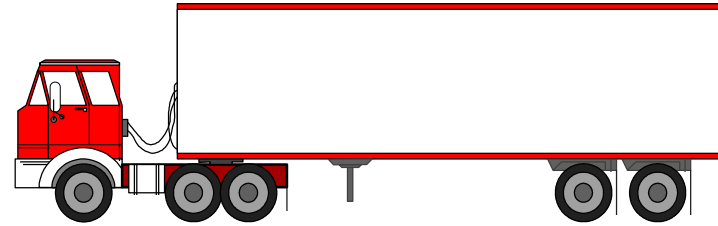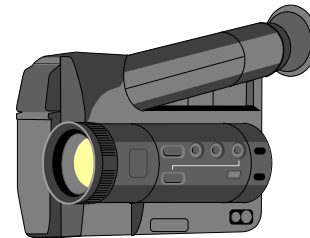- **IMASE Simulation and Scoring System (ISSS)**

# Current Contractor Support

**AI/EWTS
FIM
GPS**

**VMTs - EWMF**

**COMMUNICATION
SYSTEMS**

**VIDEO SYSTEMS**